

ABSTRACT

A vertebral plate system and associated method minimizes the number of required multiple configurations and sizes of hardware on hand during surgery for repair, stabilization or fusion of bone segments. A novel aspect of the invention is a resilient split ring that cooperates with angled contact surfaces in a plate for allowing convenient and fast dynamic locking between the plate and a bone screw. In another aspect of the present invention, a screw or similarly elongated fastener having a generally spherical or part-spherical head with a section of helical threads is configured in a generally horizontal band and positioned around a maximum-diameter section of the head. The screw is loosely retained to a first structure by a snap- ring formed from a ring of elastic material having a slot cut so that the ring is a "C" ring. The ring is seated on an annular shoulder formed in a through-hole in the first structure. The section of the through-hole above the shoulder tapers inwardly in an upward direction to a minimum diameter that is smaller than the outside diameter of the ring when the ring is in an un-stressed state. The inner diameter of the ring has an edge that is adapted to cooperate with and ride in the threads on the screw head.